

# NPDES Phase II Small MS4 Permit Program

## Permit Year 2

## SWMP Summaries & Select Metrics MA Traditional MS4s

76% Reporting (180/237)  
~70% Provided Significant Metric Data (126/180)



0% 10% 20% 30% 40% 50% 60% 70% 80% 90%

Brochures/Pamphlet

80%

Web Page

59%

School Programs

46%

Local Cable  
Access/PSAs

37%

Displays/Posters/Kiosks

32%

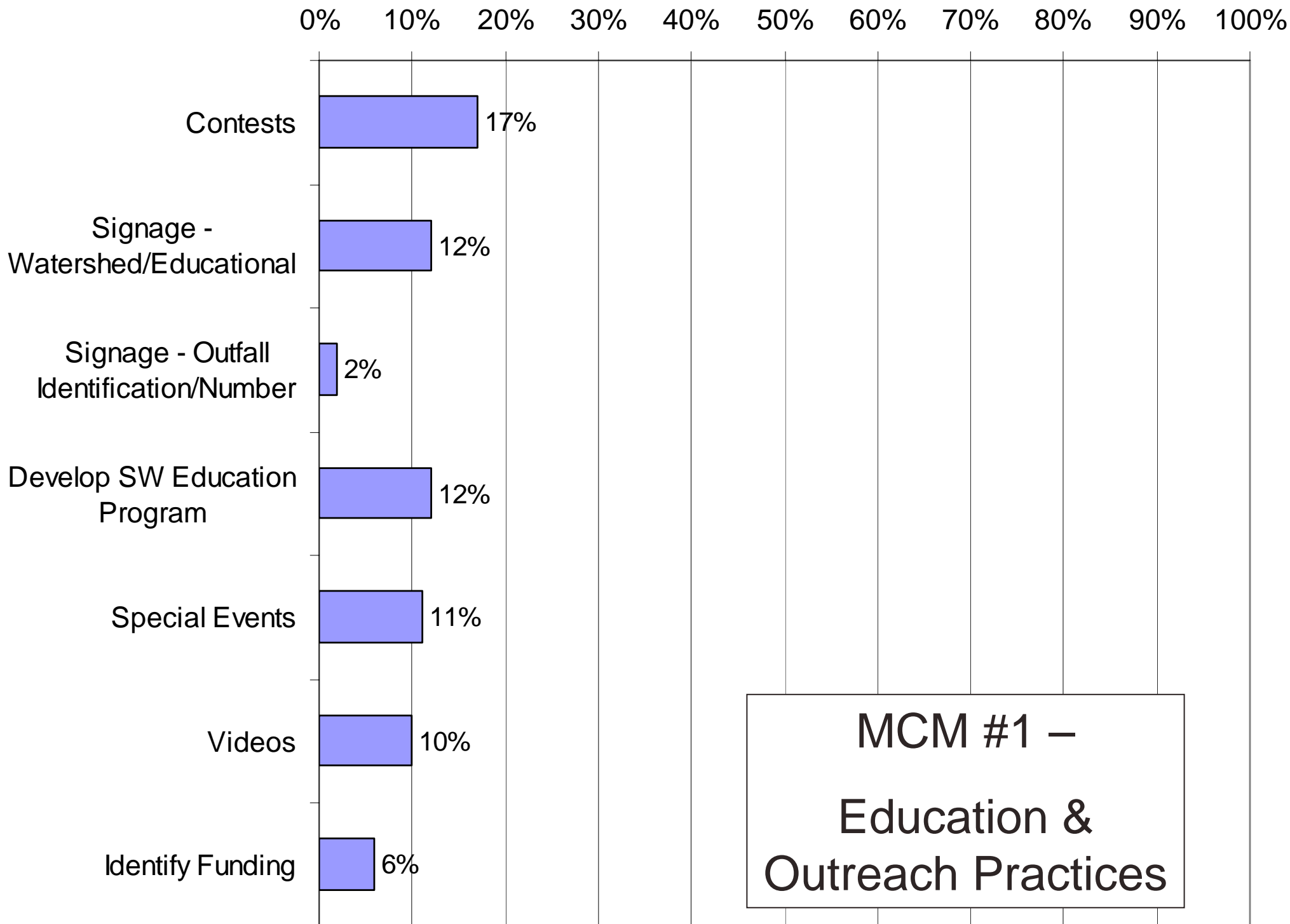
Press  
Releases/Newspaper  
Articles

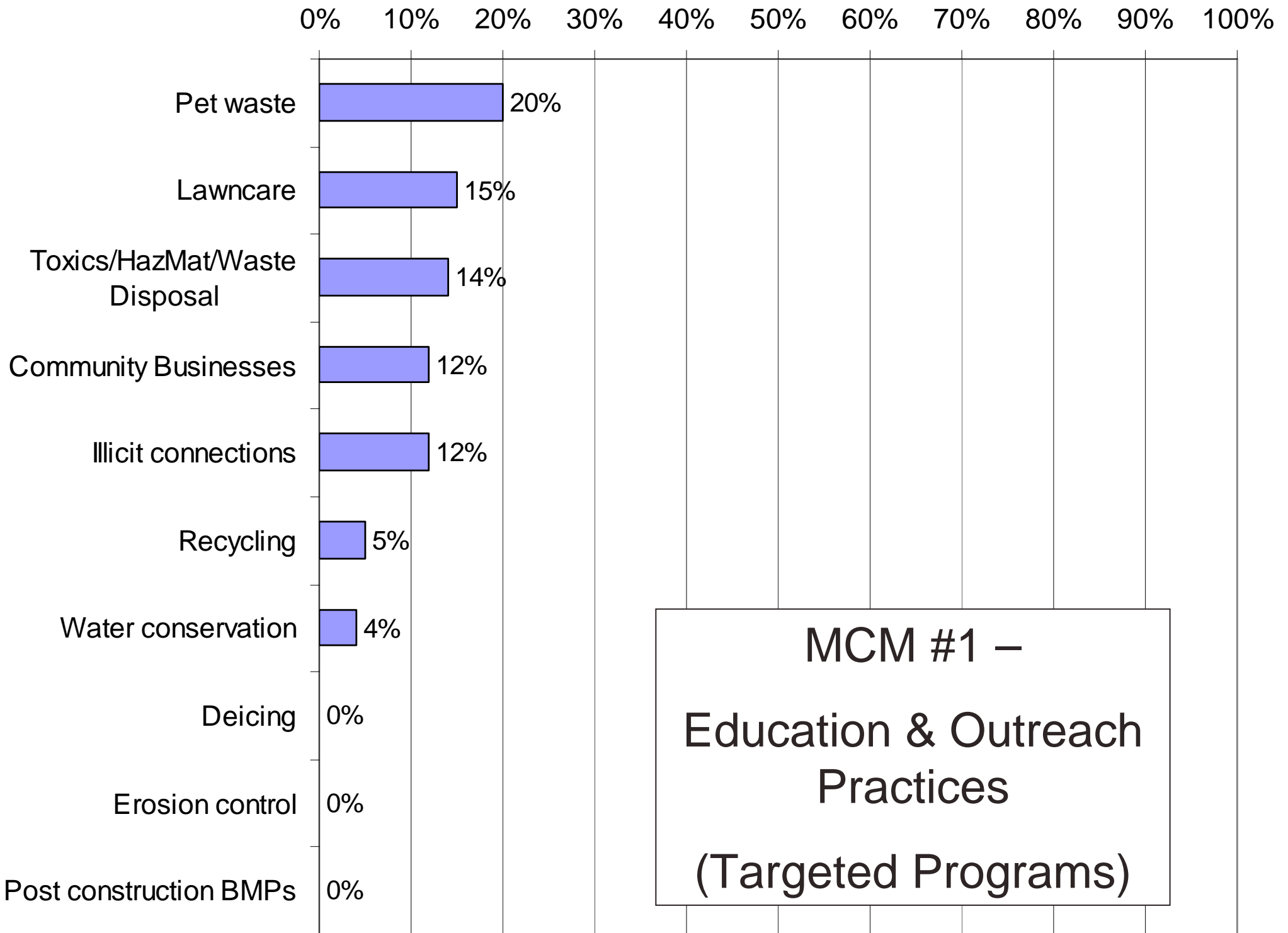
26%

Media - Undefined

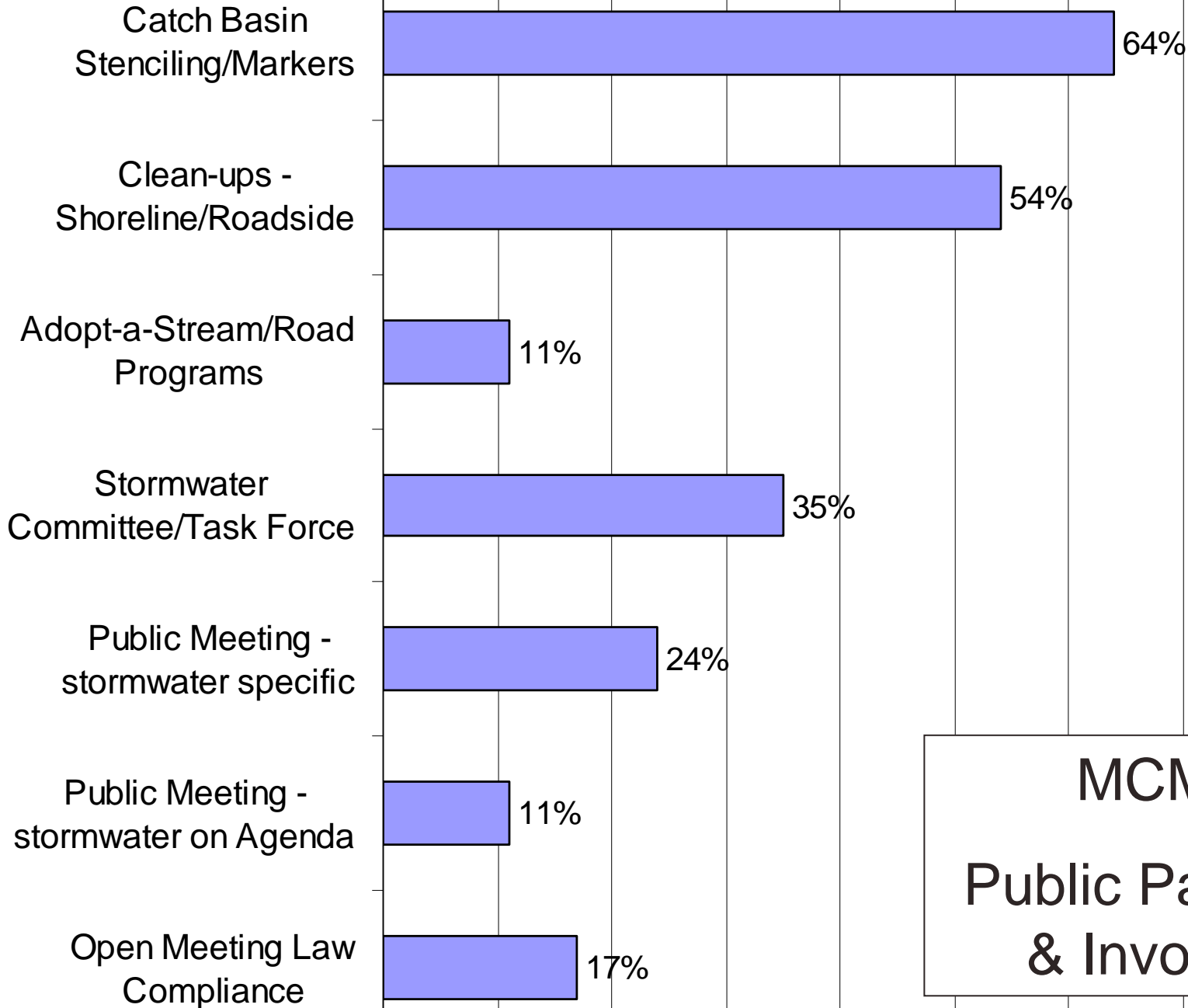
7%

MCM #1 –  
Education &  
Outreach Practices



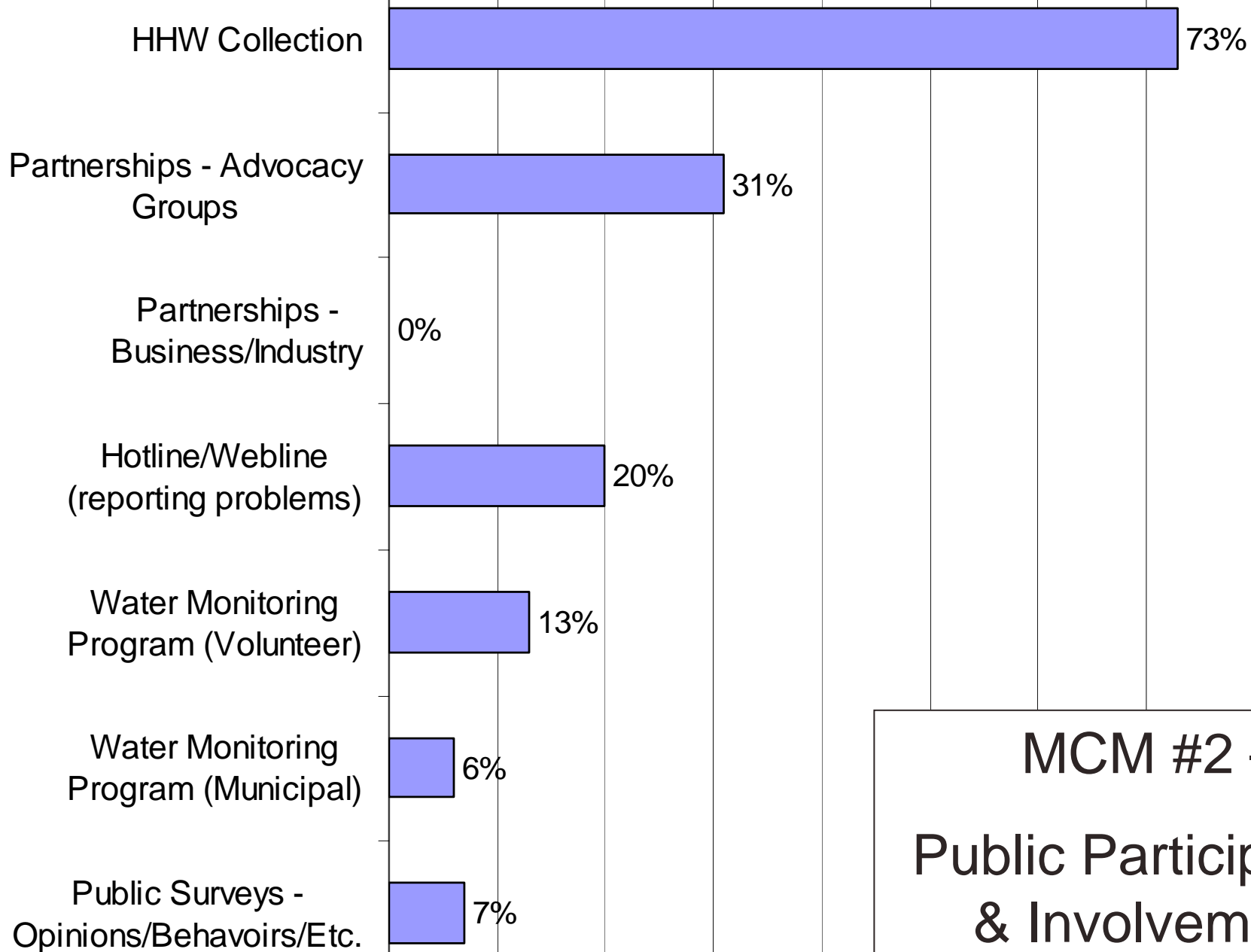


0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

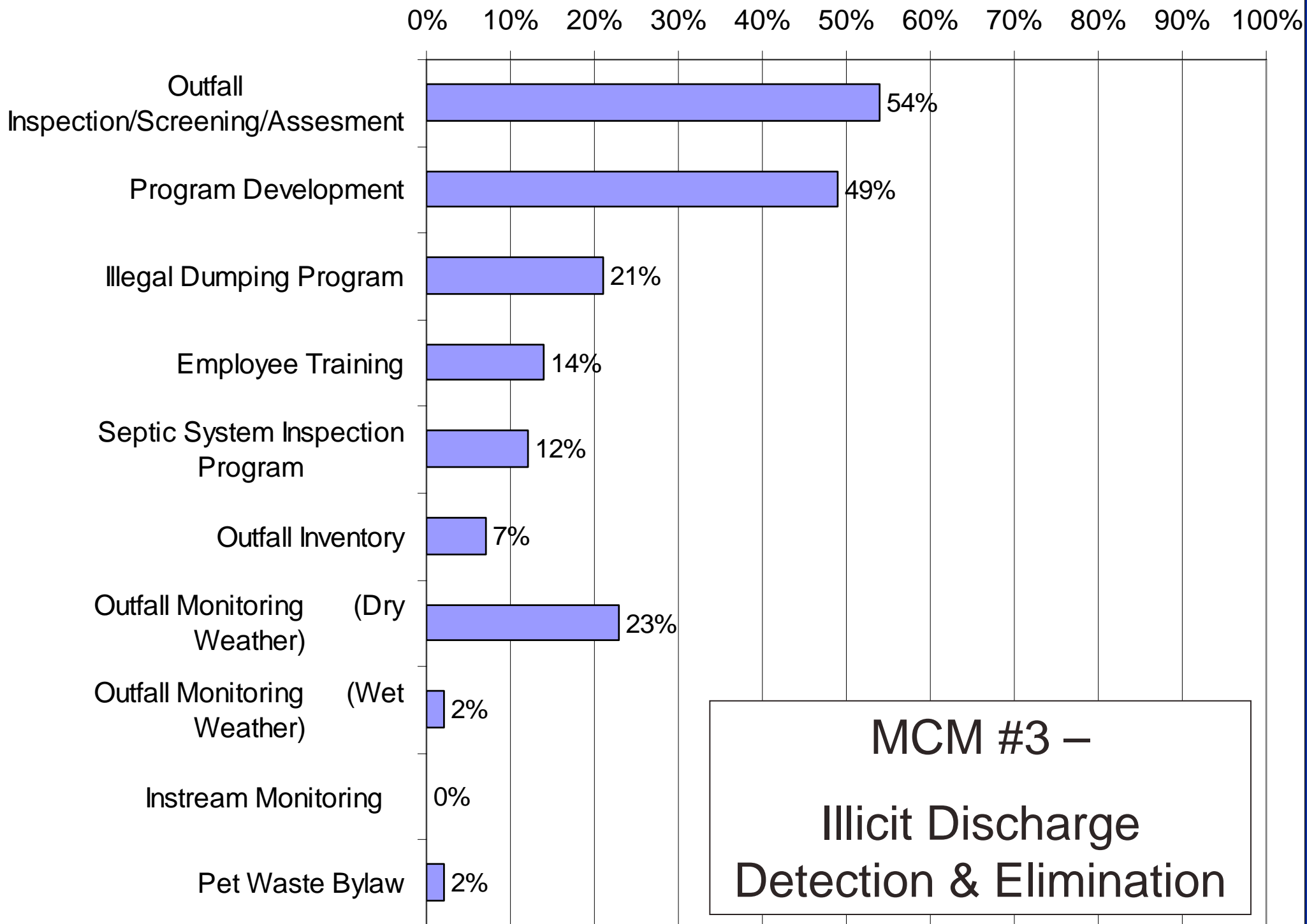


**MCM #2 –  
Public Participation  
& Involvement**

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%



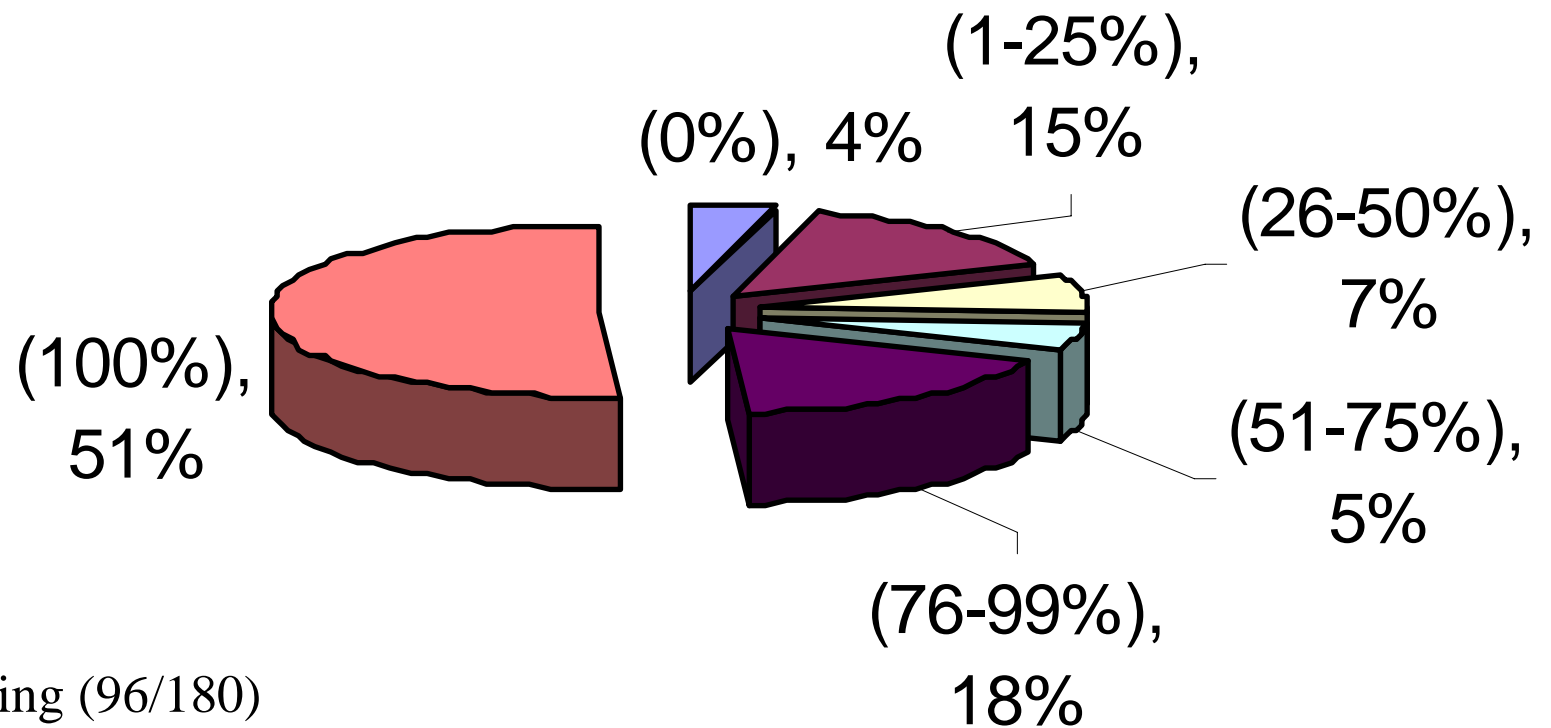
**MCM #2 –  
Public Participation  
& Involvement**



# MCM #3 – IDDE Select Metrics

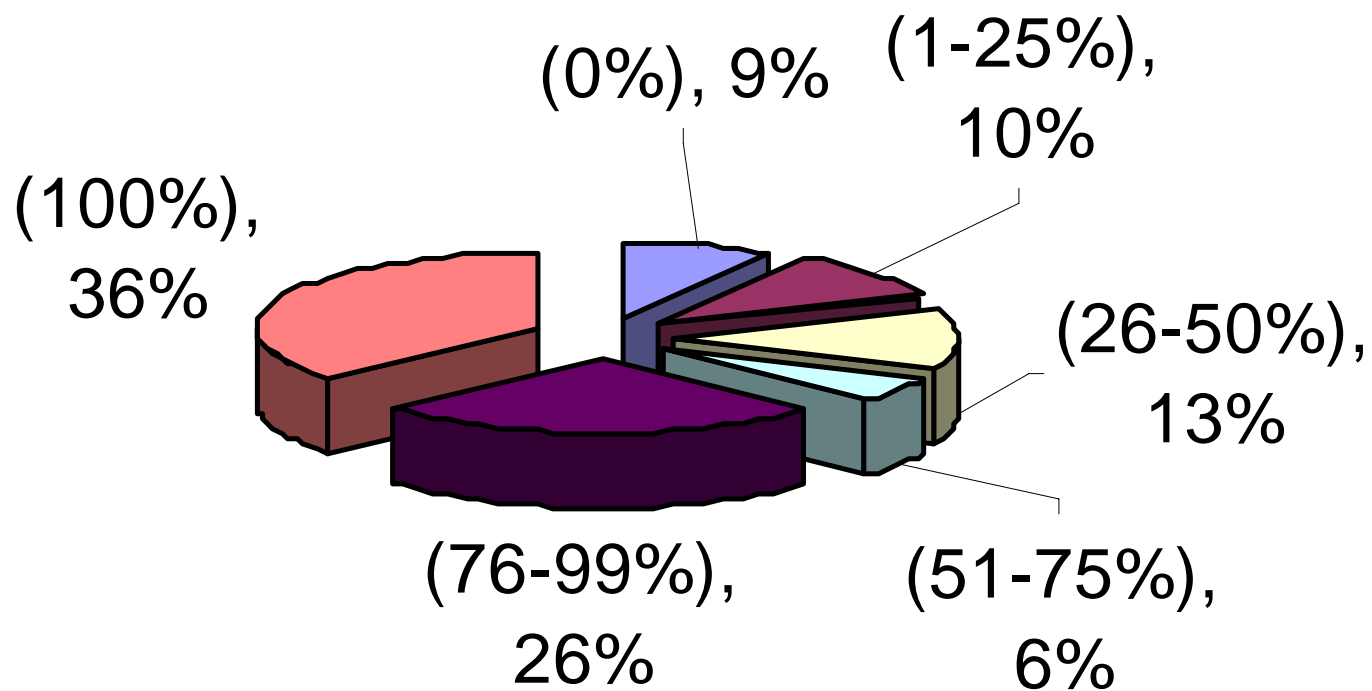
	% Using or #	% Reporting (#/180)
Outfall Mapping Complete	77%	53%
System-Wide Mapping Complete	71%	44%
Using GIS	54%	54%
Illicit Connections Identified	242	37%
Illicit Connections Removed	61	31%
% Illicit Connections Removed	25%	31%

## Status of Outfall Mapping (% Complete)



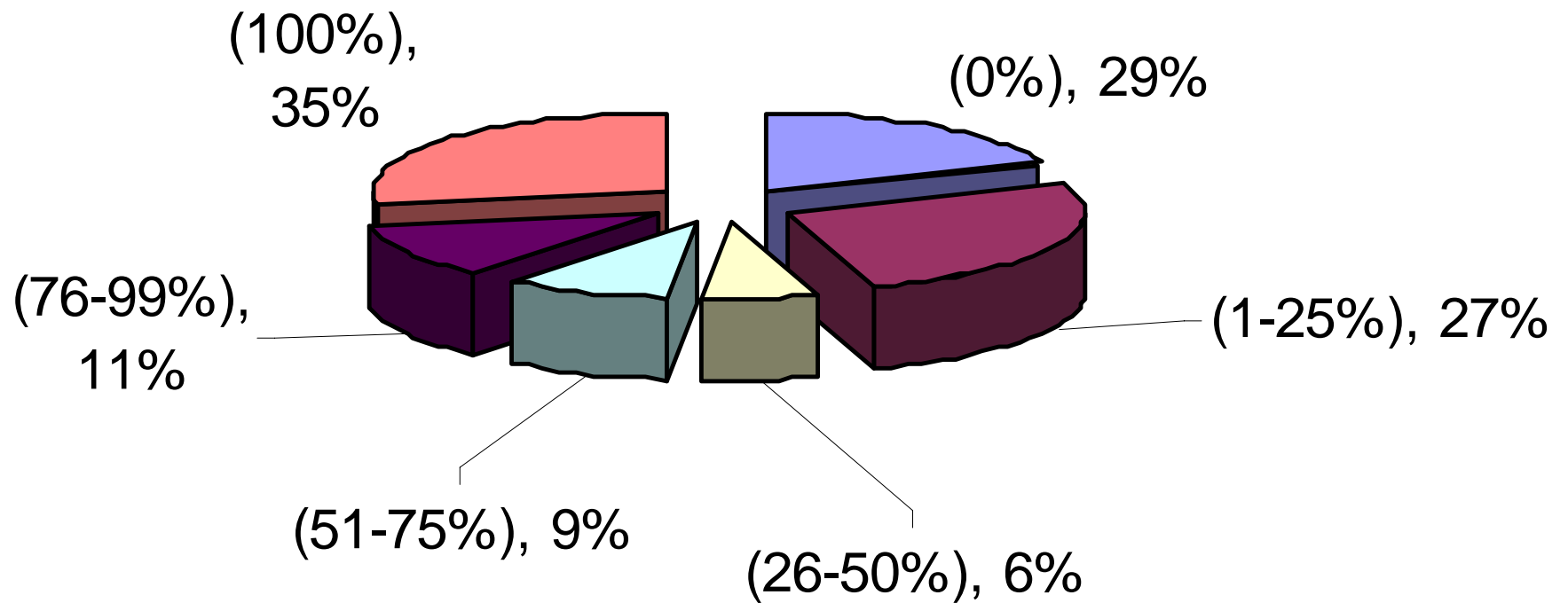
\* 53% reporting (96/180)

## Status of System Wide Mapping (% Complete)



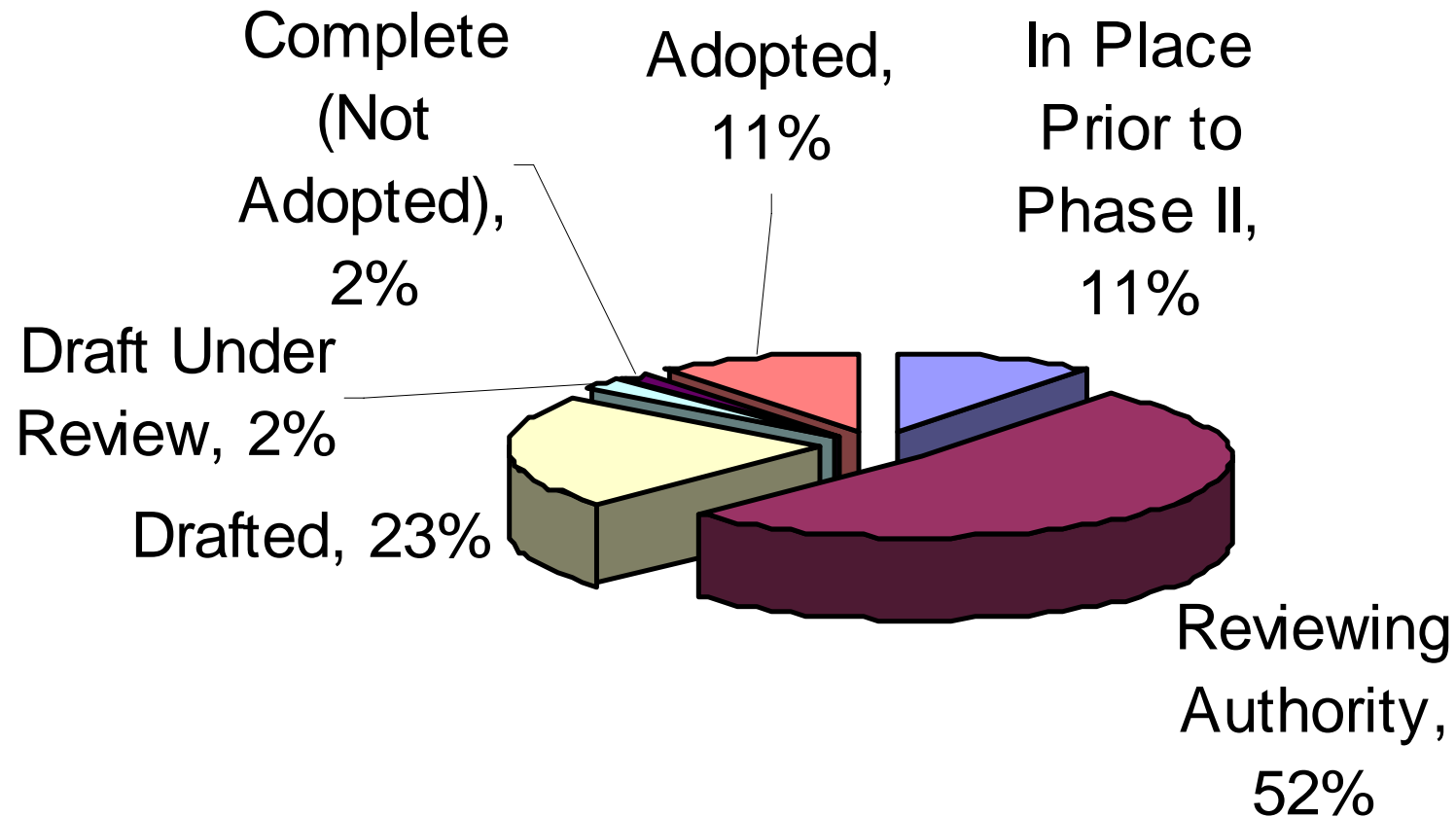
\* 44% reporting (80/180)

# Percentage of Outfalls Inspected/Screened



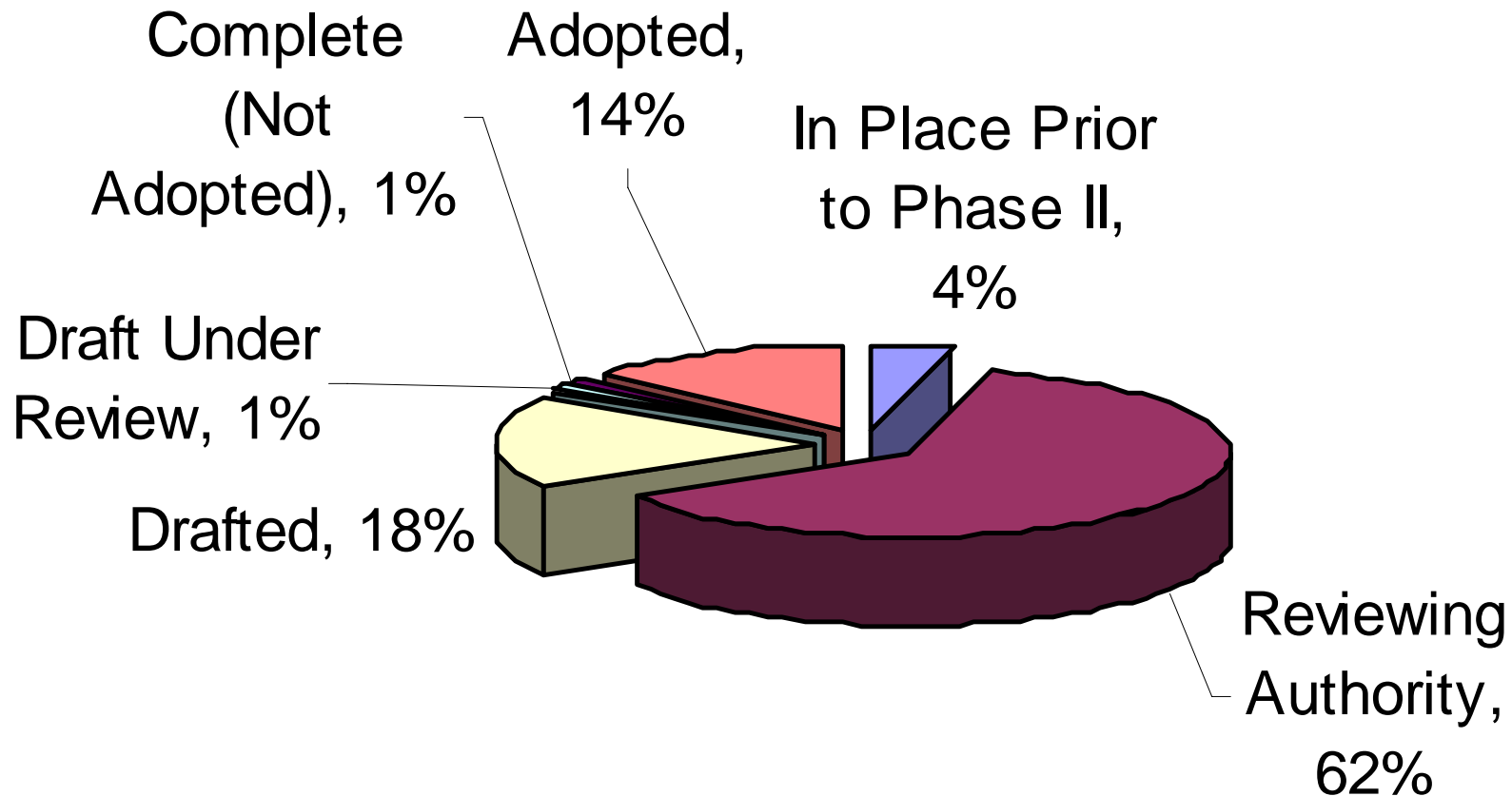
\* 36% reporting (64/180)

# Regulatory Mechanism Status - IDDE



\* 73% reporting (132/180)

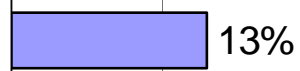
## Supporting Regulations Status - IDDE



\* 41% reporting (74/180)

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Standard ESC Specs. & Detail  
DWGs



13%

Plan Review Process



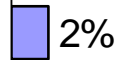
43%

Building Permit process



3%

Pre-Construction/ Coordination  
Meetings



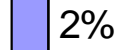
2%

Inspection Program/Procedures



56%

Inspector Training



2%

Inspection Program by Third  
Pary

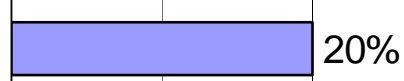
0%

Enforcement Procedures



19%

Procedure for receipt &  
consideration of public input



20%

Public Compliant Hotline

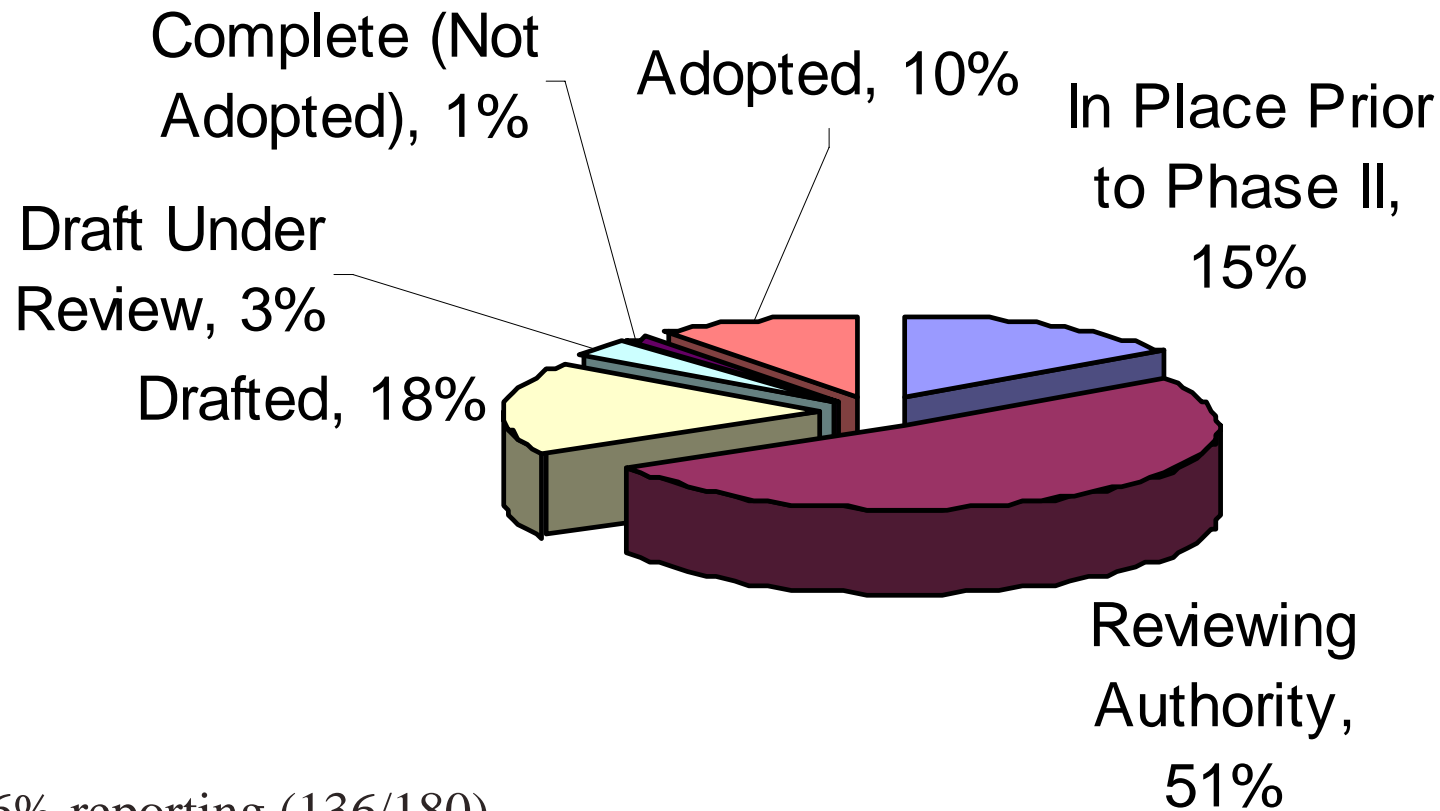


14%

MCM #4 –

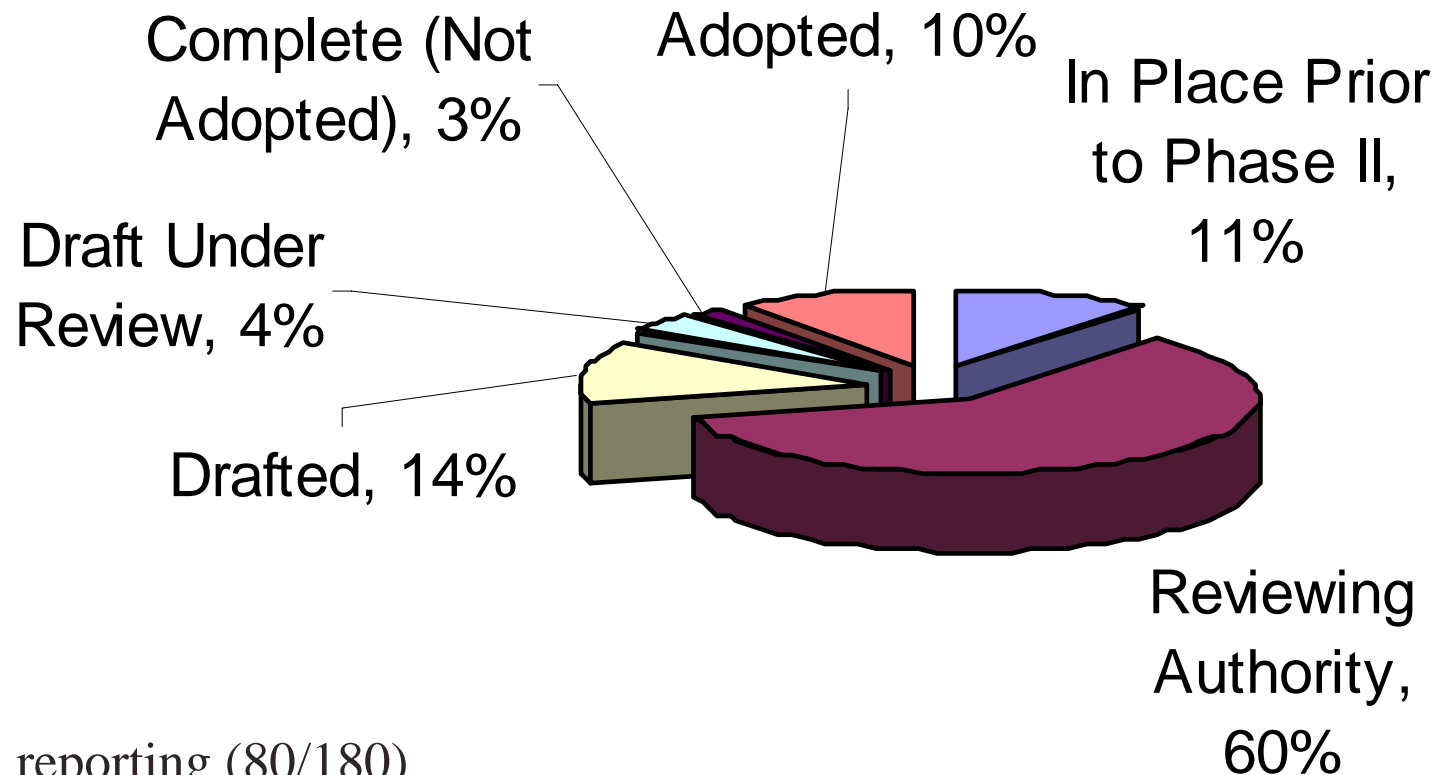
Construction Site  
Runoff Control

# Regulatory Mechanism Status - Construction Site Runoff



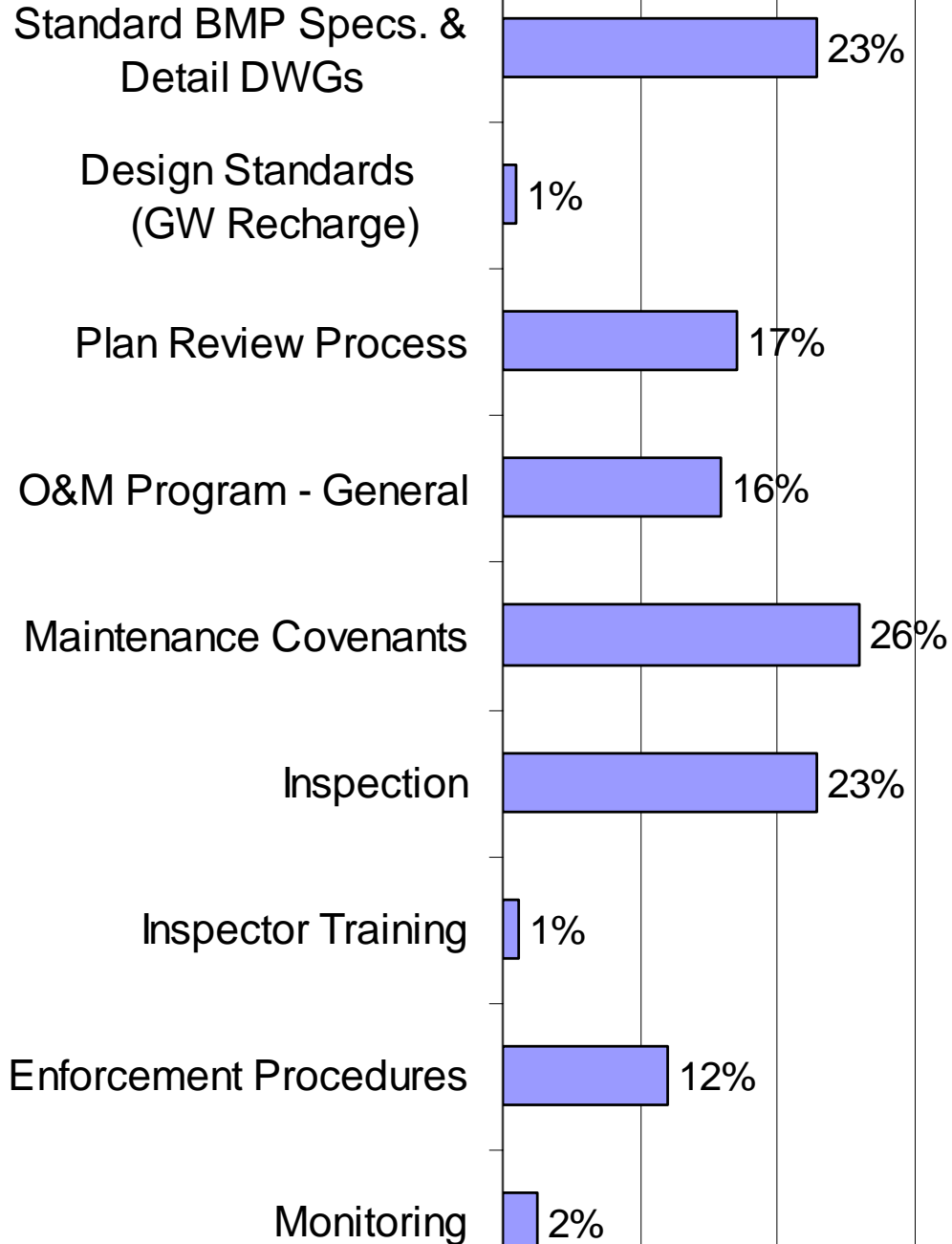
\* 76% reporting (136/180)

# Supporting Regulations Status - Construction Site Runoff



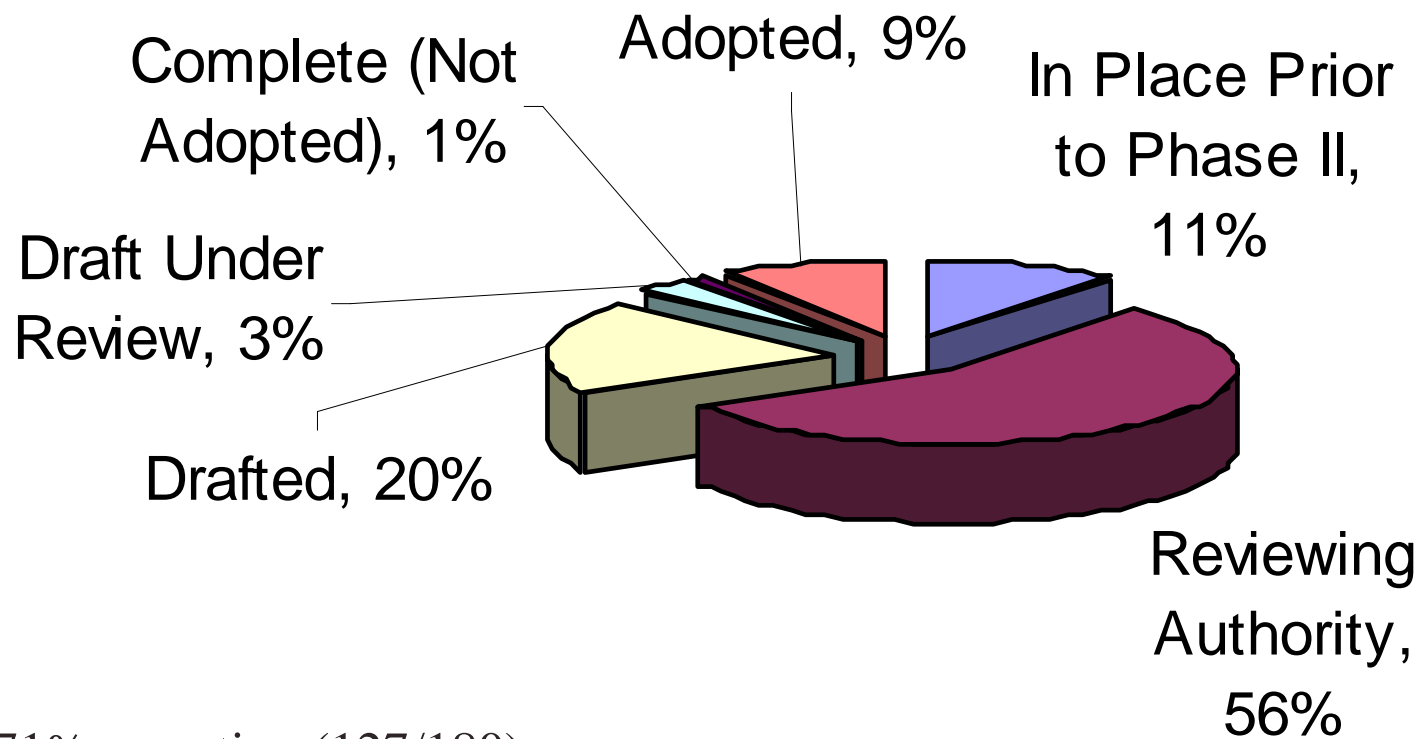
\* 44% reporting (80/180)

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%



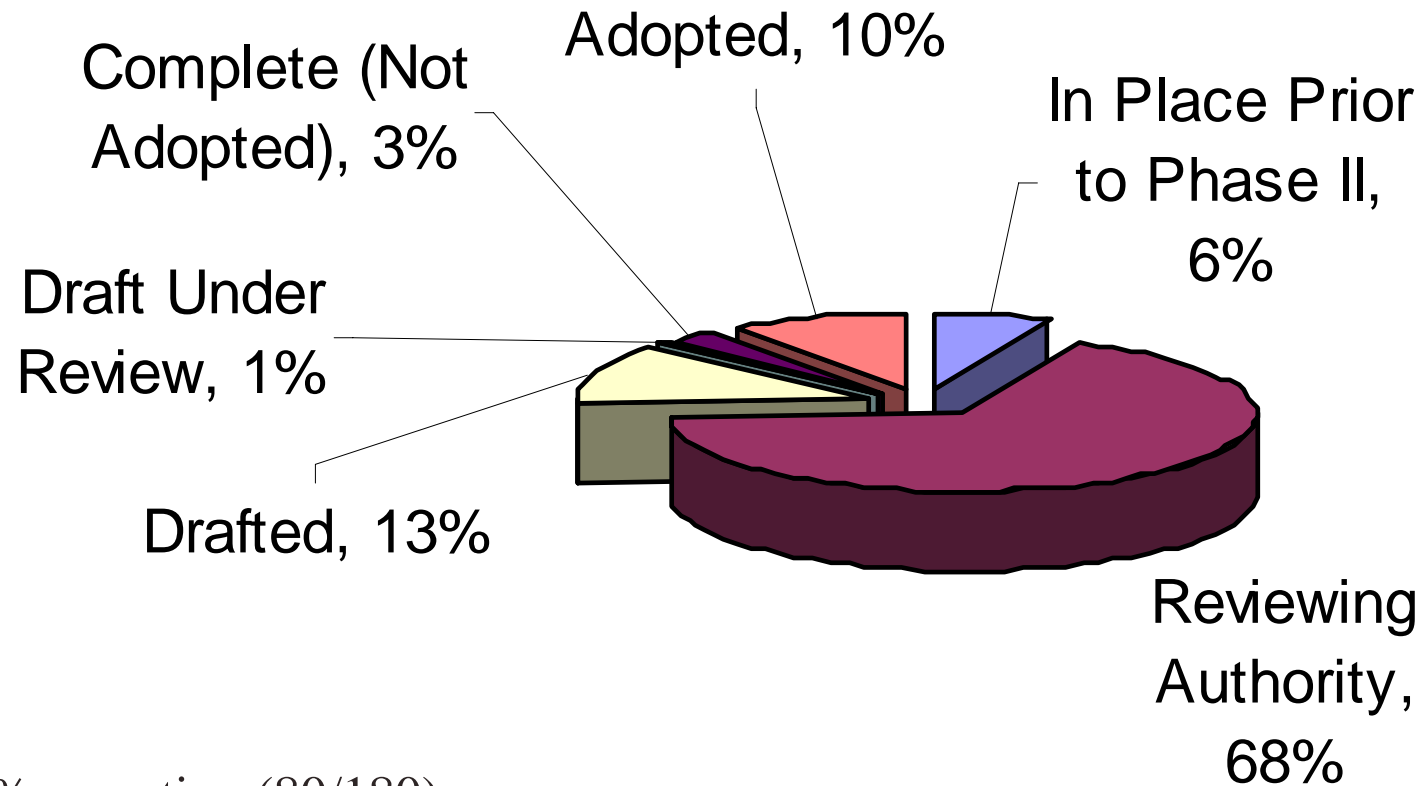
**MCM #5 –  
Post-Development  
Runoff Control**

# Regulatory Mechanism Status - Post Development Runoff



\* 71% reporting (127/180)

# Supporting Regulations Status - Post Development Runoff



\* 44% reporting (80/180)

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Catch Basin/Pipe  
Cleaning

81%

Street Sweeping

78%

Employee Training -  
Stormwater Topics

72%

General O&M Program

67%

Deicing

32%

SWPPP/SPCC Plan

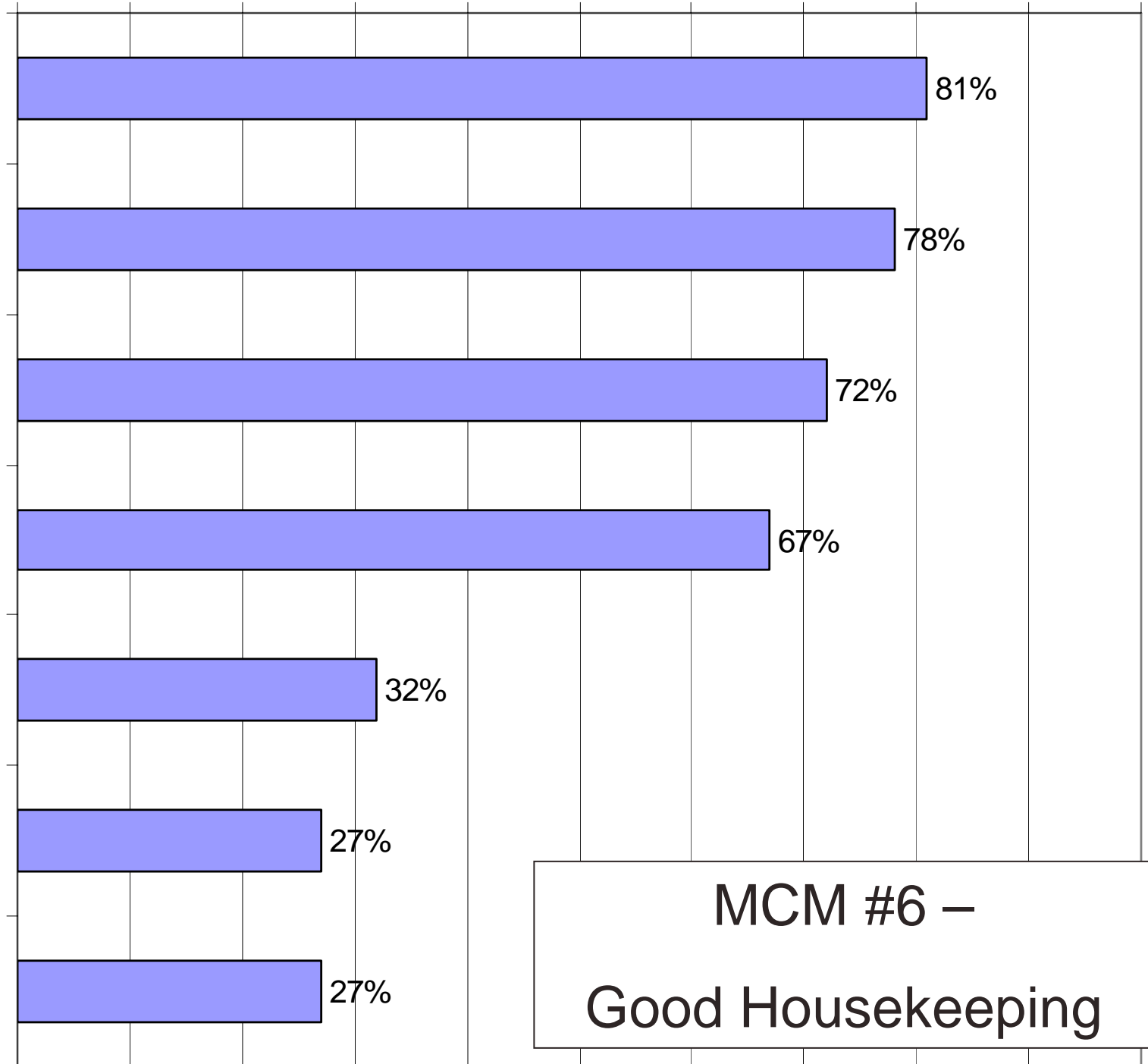
27%

Grounds Care/IPM

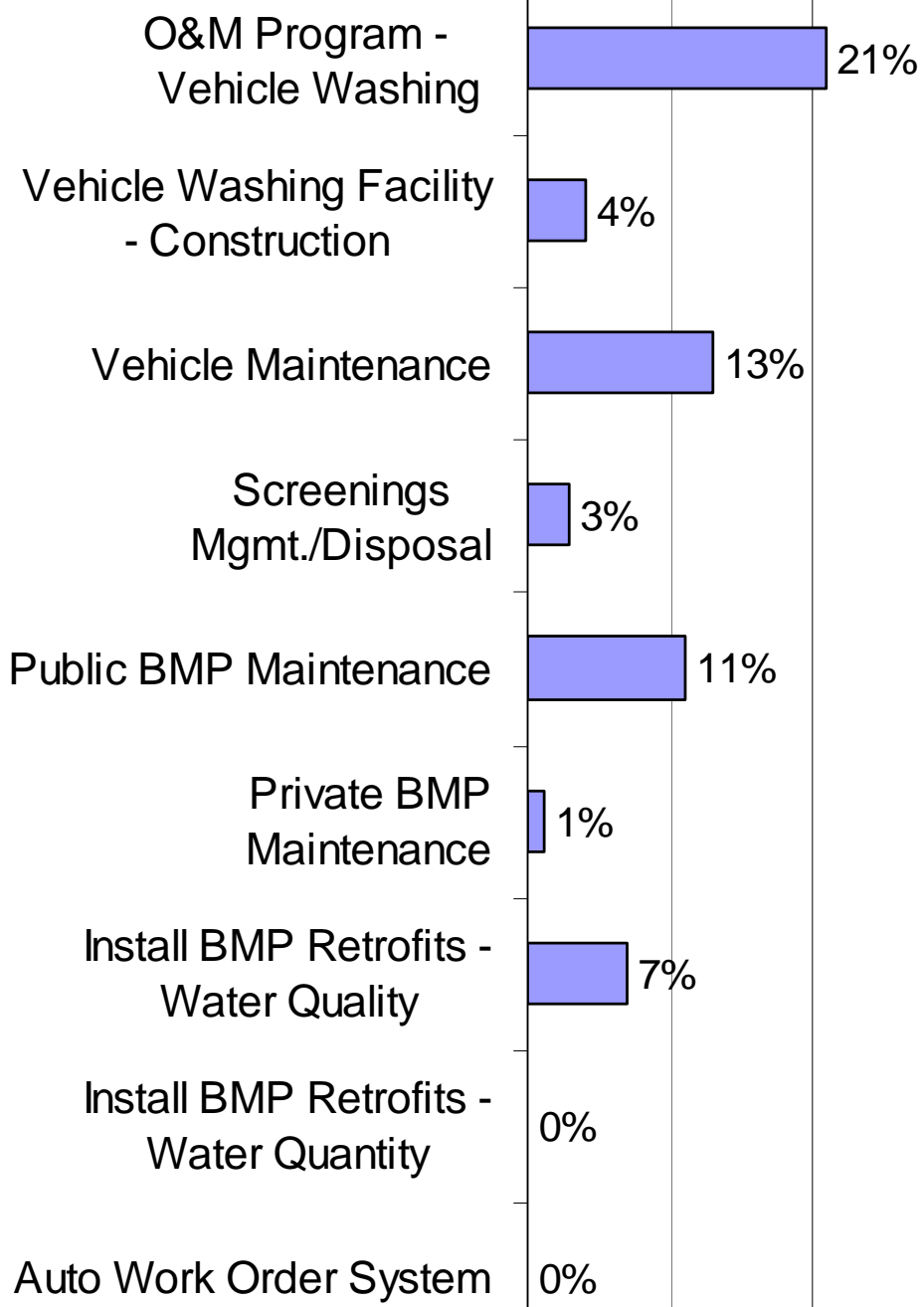
27%

MCM #6 –

Good Housekeeping



0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%



MCM #6 –  
Good Housekeeping

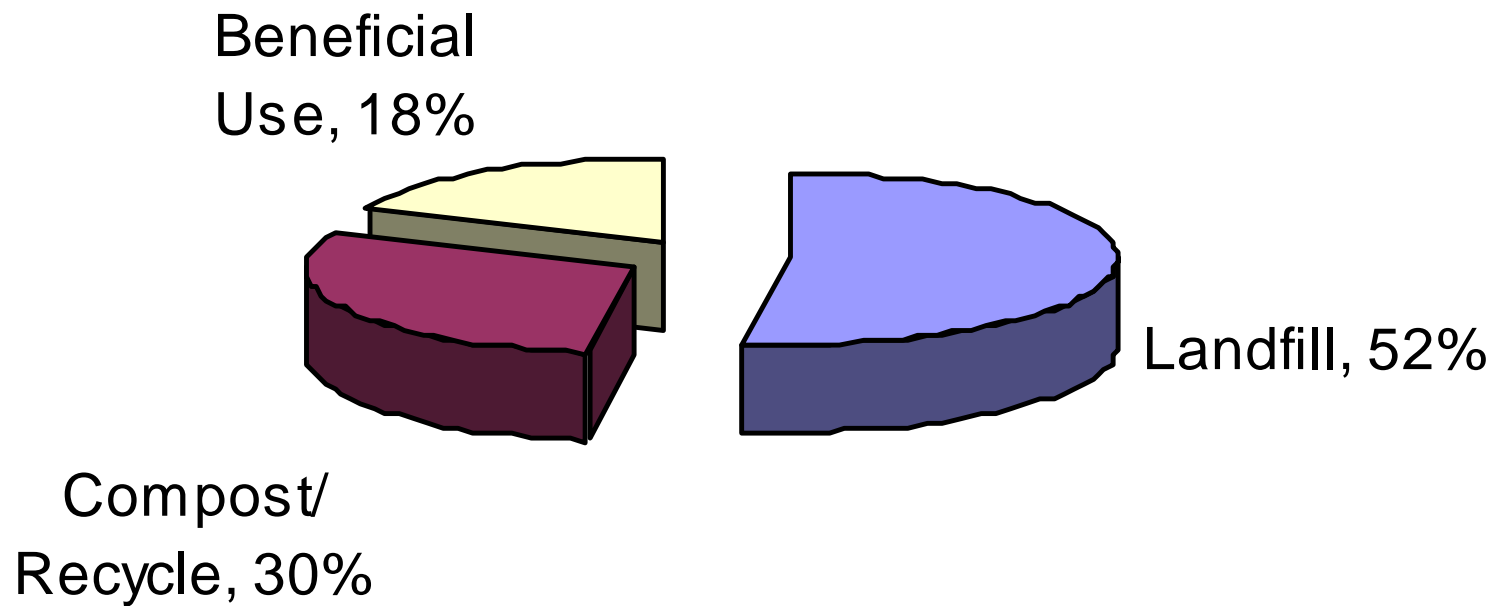
# MCM #6 – Green Space Metrics

	% or % Avg. Reduction	% Reporting (#/180)
Fertilizer Use	-24%	13%
Fertilizers Not Used (prior to phase II)	25%	
Herbicide Use	-62%	14%
Herbicides Not Used (prior to phase II)	48%	
Pesticide Use	-52%	15%
Pesticides Not Used (prior to phase II)	41%	

# MCM #6 – Catch Basin Metrics

	Avg. Frequency (times/yr) or #	% Reporting (#/180)
Catch Basin Cleaning (Commercial/Arterial)	1.2	61%
Catch Basin Cleaning (Non-Commercial/Non-Arterial)	0.9	58%
Avg. # Structures Cleaned (Median)	1400 (1000)	41%
Avg. LF Storm Drain Cleaned (Median)	7900 (1000)	19%
Avg. Qty. Screenings/Debris Removed (tons) (Median)	740 (360)	22%
Avg. # of CBs stenciled (Median)	140 (50)	15%

# CB Screenings Use & Disposal

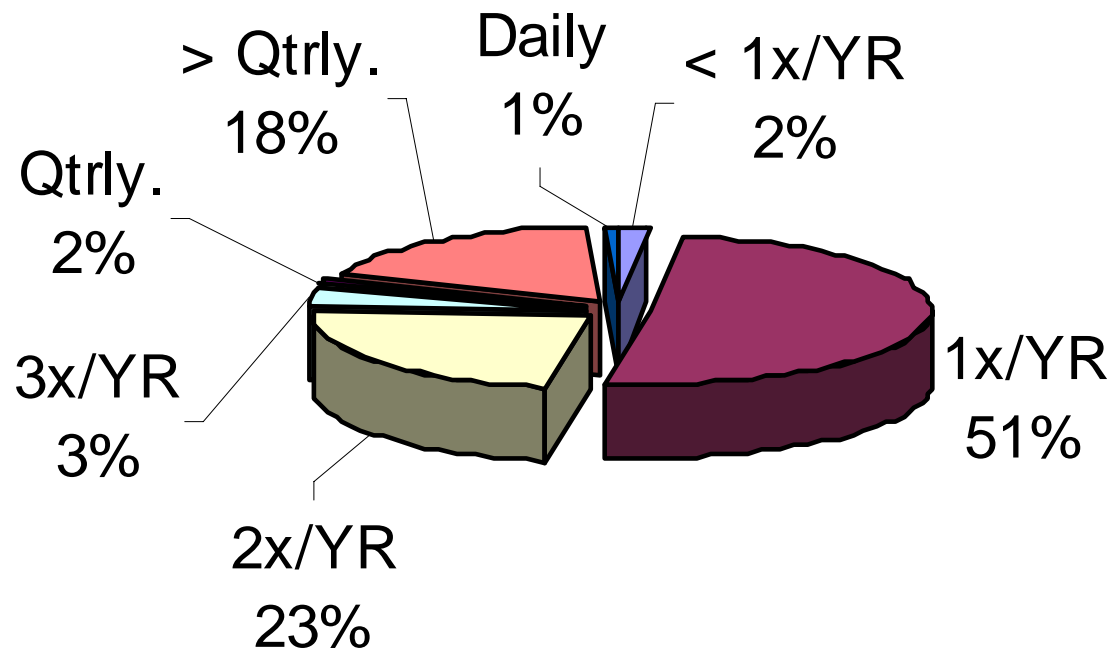


\* 24% reporting (44/180)

# MCM #6 – Street Sweeping Metrics

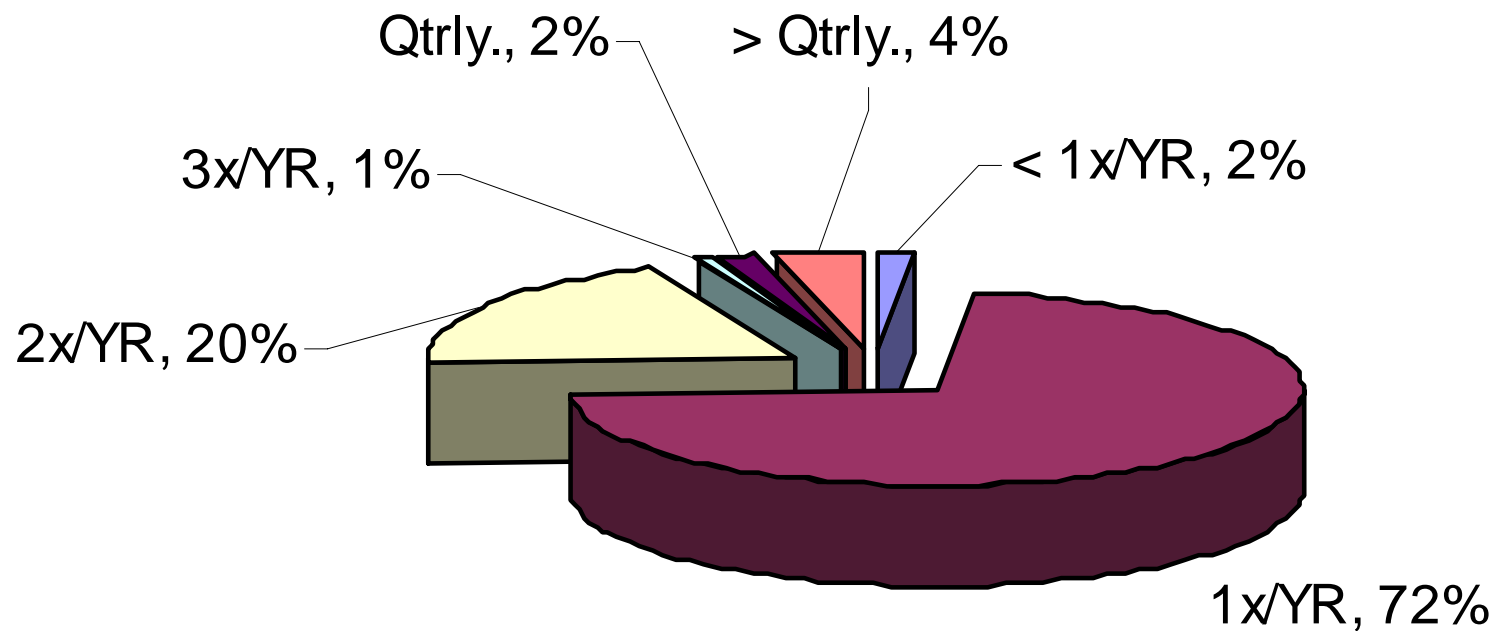
	Frequency (times/yr) or #	% Reporting (#/180)
Street Sweeping (Commercial/Arterial)	10.4	67%
Street Sweeping (Non-Commercial/ Non-Arterial)	2	70%
Vacuum Sweepers Purchased/Leased	31	24%
Vacuum Sweepers Specified - Contracts	7	19%

## Frequency of Street Sweeping (Commercial/Arterial)



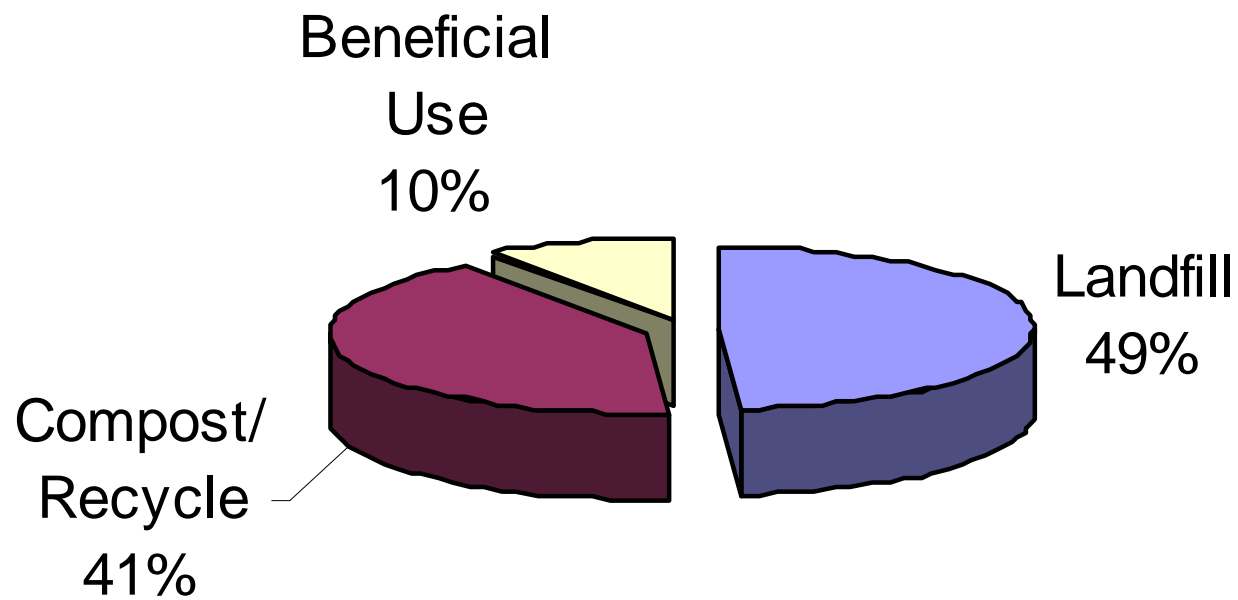
\* 67% reporting (121/180)

## Frequency of Street Sweeping (Non-Commercial/Non-Arterial)



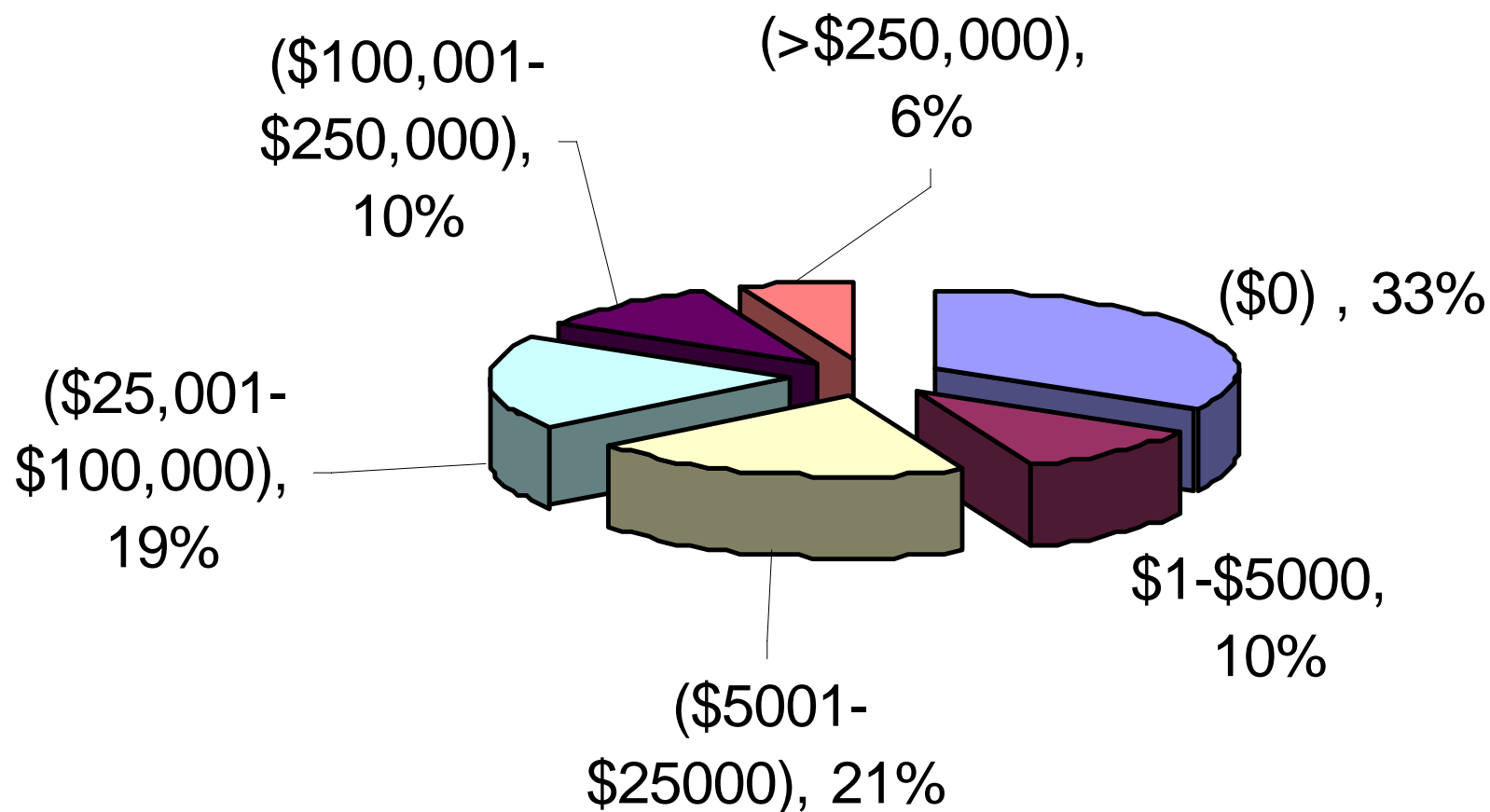
\* 70% reporting (126/180)

# Street Sweepings Use & Disposal



\* 23% reporting (41/180)

# Annual Expenditures



\$62,082	(Mean)	27% (Percent Reporting, 48/180)
\$17,950	(Median)	

13 Stormwater Positions Created/Staffed (31% Reporting, 56/180)

# MCM #6 – Programmatic Metrics

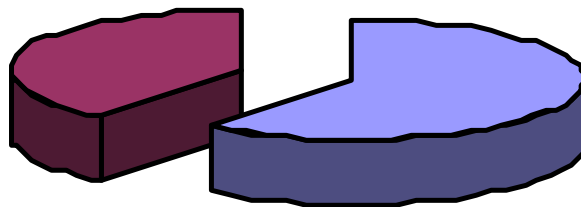
	# Implementing Program	% Reporting (#/180)
Annual HHW days sponsored (Avg. # days/yr)	140 (2)	78%
School Curricula Implemented	42	43%
SW Mgmt. Comm. Established	57	48%
Stream Teams Established/ Supported	25	31%

# MCM #6 – Deicing Metrics

	% utilizing method	% Reporting (#/180)
Automatic or Zero-velocity spreaders	50%	27%
Manual control spreaders used	84%	28%
Pre-wetting techniques	40%	28%
Salt pile(s) covered in storage shed(s)	99%	40%

## Salt/Sand Ratio

Average NaCl  
Ratio  
40%



Average Sand  
Ratio  
60%

\* 22% reporting (41/180)

## Putting a lid on manhole theft

**BEIJING** China's capital is testing a new kind of manhole cover to put a lid on rampant theft, Xinhua news agency said. Missing manhole covers are a hazardous fact of life in Beijing, where they are stolen to be sold as scrap.

"The new manhole covers will be made of non-metal materials with no recycling value," Wang Xin, spokesman for the city's utilities management department, said. **REUTERS**

